

**MONTEREY BAY UNIFIED AIR POLLUTION CONTROL DISTRICT
TITLE V OPERATING PERMIT**

24580 Silver Cloud Court
Monterey, CA 93940
Telephone: (408) 647-9411

ISSUED TO:

National Refractories & Minerals Corporation
P.O. Box 30
Moss Landing, CA 95039

PLANT SITE LOCATION:

11771 Old Stage Road
Salinas, CA 93908

ISSUED BY:

Douglas Quetin, Air Pollution Control Officer

Date

Nature of Business: Mining & Non-metallic Mineral Processing

SIC Codes: 1422 - Dolomite Mining & Processing
3274 - Dolomitic Lime

RESPONSIBLE OFFICIAL:

Name: Mr. R. C. Randall
Title: Manufacturing Manager
Phone: (408) 633-2413

FACILITY CONTACT PERSON:

Name: Mr. Mark Zanko
Title: Plant Engineer
Phone: (408) 449-7206

TABLE OF CONTENTS

FACILITY DESCRIPTION 3

EQUIPMENT DESCRIPTION 3

FEDERALLY ENFORCEABLE EMISSION LIMITS AND STANDARDS 4

TESTING REQUIREMENTS AND PROCEDURES 5

MONITORING AND RECORD KEEPING REQUIREMENTS 7

REPORTING REQUIREMENTS 8

GENERAL CONDITIONS 9

FACILITY DESCRIPTION

National Refractories & Minerals Corporation operates a mineral processing facility located in the Natividad area North-East of Salinas, California. This facility was originally constructed in 1942. This facility is designated as the Natividad Plant by National Refractories, and is a mining and non-metallic mineral processing plant. At this facility dolomite is mined, crushed and screened to produce raw dolomite mineral products for sale, or to be further processed to produce calcined dolomite for sale.

The Natividad Plant is considered a federal Major Source and subject to the Title V permitting program due to the potential to emit Oxides of Nitrogen (NO_x) and Particulate Matter less than 10 microns in diameter (PM₁₀).

EQUIPMENT DESCRIPTION

MINING & NON-METALLIC MINERAL PROCESSING FACILITY CONSISTING OF:

1. Mobile Surface Mining Equipment, Mined Material To Primary Crushing & Screening.
2. Primary Crushing & Screening, Material to Heavy Media Separation System, ¾" - Material To Primary Byproduct Stockpile.
3. Heavy Media Separation System, Dolomite Rock To Secondary Crushing & Screening, Dolomite Sand To East Plant, And Float Rock to Construction Product Stockpile.
4. Secondary Crushing & Screening, Providing Sized Material To The East Plant, The Dolomite Sizing Facility, The Lime Plant For Milling, The Kilns, Or To Stockpiles for Shipment.
5. East Plant, Dolomite Dried In A 5 MMBtu/Hr Natural Gas Fired Rotary Dryer And Product Processed For Shipment By Screening And Milling, Finished Product To Storage, Then To Truck Loadout And/Or Sacking Systems. The Rotary Dryer Is Vented To A Cyclone And A Rotoclone In Series, And All Other Emission Points Are Vented To Baghouse Dust Collectors.
6. Dolomite Sizing Facility, Dolomite Prepared For Shipment By Drying In A 5 MMBtu/Hr Natural Gas Or Fuel Oil Fired Rotary Dryer, Then Crushed And/Or Screened And/Or Milled, Finished Product To Storage, Then To Truck Loadout And/Or Sacking Systems. The Rotary Dryer Is Vented To A Cyclone And A Rotoclone In Series, And All Other Emission Points Are Vented To Baghouse Dust Collectors.
7. Lime Plant Milling, Dolomite Prepared For Shipment By Milling, Finished Product To Storage, Then To Truck Loadout And/Or Sacking Systems. All Emission Points Are Vented To Baghouse Dust Collectors.

8. Kilns, Dolomite Calcined In Kilns 1 Through 4 (Identified Below), Then The Calcined Dolomite Is Prepared For Shipment By Screening And Milling, With The Finished Product To Storage And Truck Loadout. All Emission Points Vented To Baghouse Dust Collectors.

Kiln Number 1, 8.5' Diameter By 298.5' Long Rotary Kiln, 95 MMBtu/Hr Maximum Heat Input, Fuel Oil And/Or Natural Gas Fired. Kiln Vented Through A High Efficiency Multiple Cyclone Collector, And A Baghouse Dust Collector.

Kiln Number 2, 8.5' Diameter By 298.5' Long Rotary Kiln, 95 MMBtu/Hr Maximum Heat Input, Fuel Oil And/Or Natural Gas Fired. Kiln Vented Through A High Efficiency Multiple Cyclone Collector, And A Baghouse Dust Collector.

Kiln Number 3, 9' Diameter By 250' Long Rotary Kiln, 115 MMBtu/Hr Maximum Heat Input, Fuel Oil And/Or Natural Gas Fired. Kiln Vented Through A High Efficiency Multiple Cyclone Collector, And A Baghouse Dust Collector.

Kiln Number 4, Multiple Hearth Kiln, 20' Diameter, 12 Hearth, Natural Gas Fired. Kiln Vented Through A High Efficiency Multiple Cyclone Collector, And A Baghouse Dust Collector.

9. Steam Boiler, 2.7 MMBtu/Hr Maximum Heat Input, Natural Gas Fired With Fuel Oil Standby.

10. Ancillary Equipment:

Gasoline Storage Tanks.

Abrasive Blasting Equipment.

FEDERALLY ENFORCEABLE EMISSION LIMITS AND STANDARDS

1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three (3) minutes in any one (1) hour which is as dark or darker than Ringelmann 1 or equivalent 20% opacity. [District Rule 400]
2. Particulate matter shall not exceed 0.15 grains per standard dry cubic foot in any exhaust stream. [District Rule 403]
3. Particulate matter from any exhaust stream shall not exceed the lessor of 40 pounds per hour or the pound per hour limit established by the following mass emission limit equation [District Rule 403]:

$$E = 4.10 P^{0.67}$$

where:

E = rate of emission in pounds per hour

P = process weight rate in tons per hour

4. Sulfur compounds calculated as sulfur dioxide (SO₂) shall not exceed 0.2 percent by volume in any exhaust stream. [District Rule 404]
5. The sulfur content on any fuel oil used at the facility shall not exceed 0.5 percent by weight. [District Rule 412]
6. The sulfur content on any gaseous fuel used at the facility shall not contain sulfur compounds, calculated as hydrogen sulfide at standard conditions, in excess of 50 grains per 100 cubic feet. [District Rule 412]
7. National Refractories & Minerals Corporation's gasoline storage tanks shall be equipped with permanent submerged fill pipes. [District Rule 418]
8. National Refractories & Minerals Corporation shall prevent the emission of 95 percent by weight of the gasoline vapors displaced during the filling of the storage tanks at the gasoline dispensing facility by the use of Phase I Vapor Recovery. [District Rule 418]
9. National Refractories & Minerals Corporation shall limit emissions of volatile organic compounds from the use of architectural coatings pursuant to the requirements of District Rule 426. [District Rule 426]
10. National Refractories & Minerals Corporation shall limit emissions of volatile organic compounds during solvent cleaning and degreasing operations pursuant to the requirements of District Rule 433. [District Rule 433]
11. Should the facility, as defined in 40 CFR §68.3 become subject to Part 68, then National Refractories & Minerals Corporation shall submit a risk management plan (RMP) by the date specified in 40 CFR §68.10. Once subject to Part 68, National Refractories & Minerals Corporation shall certify compliance with these requirements as part of the annual compliance certification required by 40 CFR Part 70 and this permit. [40 CFR Part 68]
12. National Refractories & Minerals Corporation shall comply with the requirements of 40 CFR Part 82 - Protection of Stratospheric Ozone. [40 CFR Part 82]

TESTING REQUIREMENTS AND PROCEDURES

13. National Refractories & Minerals Corporation shall conduct testing semi-annually, in accordance with the methodology contained in EPA Method 22 for all non-point sources. This testing will be the basis for determining compliance with condition 1.

If no emissions are observed utilizing Method 22, no further testing shall be required.

If emissions are observed from any non-point sources and that non-point source is not operation under breakdown condition as defined in and allowed for in District Rule 214, National Refractories & Minerals Corporation shall conduct testing on that non-point source within 24 hours of the Method 22 testing in accordance with the methodology contained in EPA Method 9 and the averaging/aggregating period contained in District Rule 400 to verify compliance with condition number 1 for that non-point sources. [District Rule 218]

14. National Refractories & Minerals Corporation shall conduct testing on a monthly basis in accordance with the methodology contained in EPA Method 22 for all point sources. This testing will be the basis for determining compliance with conditions 1, 2 and 3. In addition, each baghouse shall be inspected monthly for proper operation and the bags will be visually inspected for tears or loose connections.

If no emissions are observed utilizing Method 22, no further testing shall be required.

If emissions are observed from any point source and that point source is not operating under breakdown condition as defined in and allowed for in District Rule 214, National Refractories & Minerals Corporation shall conduct testing on that point source [District Rule 218]:

- 1) within 24 hours of the Method 22 testing in accordance with the methodology contained in EPA Method 9 and the averaging/aggregating period contained in District Rule 400 to verify compliance with condition number 1; and
 - 2) within 30 days of the Method 22 testing in accordance with EPA Method 5 or 5D to verify compliance with the requirements of conditions 2 and 3.
15. No testing is specified for the (Rule 404) sulfur concentration limit in condition number 4. The fuel burning equipment is assumed to be in compliance with this sulfur concentration limit based upon the engineering calculations contained in the evaluation report. If testing is conducted for condition number 4, National Refractories & Minerals Corporation should conduct testing in accordance with the methodology contained in EPA Method 6. [District Rule 218]
16. No testing is specified for the (Rule 412) fuel sulfur content limit in condition number 5 as compliance with this condition will be verified by monthly fuel sulfur content reports to be provided by the fuel supplier. If testing is conducted for condition number 5, National Refractories & Minerals Corporation should conduct testing in accordance with ASTM D1552-83, ASTM D1266-87 or ASTM D2622-87. [District Rule 218]
17. No testing is specified for the sulfur content of gaseous fuels as long as the only gaseous fuel fired is pipeline quality natural gas. If the facility fires other gaseous fuels, National Refractories & Minerals Corporation shall conduct testing of all gaseous fuel deliveries in accordance with ASTM D 1072-80, ASTM D 3031-81, ASTM D 3246-81 or SCAQMD Method 307-91 to verify compliance with condition number 6. National Refractories & Minerals Corporation shall furnish the District written results of the test prior to firing the gaseous fuel, but in no case later than thirty (30) days of completion. [District Rule 218]

MONITORING AND RECORD KEEPING REQUIREMENTS

18. National Refractories & Minerals Corporation shall maintain the monthly fuel sulfur content reports to verify compliance with condition 5. [District Rule 218]
19. National Refractories & Minerals Corporation shall maintain records showing the quantity of all gasoline delivered to the gasoline storage tanks. [District Rule 418]
20. National Refractories & Minerals Corporation shall maintain a monthly log of the facility-wide total volume of make-up solvent used, and waste solvent disposed of or recycled, for all cleaning devices using volatile organic compounds for solvent cleaning and degreasing. [District Rule 433]

The record keeping provisions of this condition do not apply to remote reservoir cold cleaners which are serviced by an independent contractor. For such remote cold cleaners, evidence of service shall be maintained.

21. As applicable National Refractories & Minerals Corporation shall maintain the following general records of required monitoring information [District Rule 218]:
 - A) the date and time of sampling or measurements;
 - B) the date(s) analyses were performed;
 - C) the company or entity that performed the analyses;
 - D) the analytical techniques or methods used;
 - E) the results of such analyses;
 - F) the operating conditions existing at the time of sampling or measurement; and
 - G) the records of quality assurance for continuous monitoring systems (including, but not limited to quality control activities, audits, and calibration drift checks) and source testing methods.
22. National Refractories & Minerals Corporation shall maintain records on the occurrence and duration of any startup or shutdown resulting from a malfunction in the operation of the control equipment under this permit. [District Rule 218]
23. National Refractories & Minerals Corporation shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring, sample collection, measurement, report, and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [District Rule 218]

REPORTING REQUIREMENTS

24. National Refractories & Minerals Corporation shall report all breakdowns to the Air Pollution Control Officer (APCO) within 1 hour of the occurrence, this one hour period may be extended

up to six hours for good cause by the APCO.

The estimated time for repair of the breakdown shall be supplied to the APCO within 24 hours of the occurrence and a written report shall be supplied to the APCO with 5 days of the occurrence. This report shall include at a minimum [District Rule 214]:

- A) a statement that the condition or failure has been corrected and the date of correction; and
- B) a description of the reasons for the occurrence; and
- C) a description of the corrective measures undertaken and/or to be undertaken to avoid such an occurrence in the future; and
- D) an estimate of the emissions caused by the condition or failure.

25. National Refractories & Minerals Corporation shall submit semiannual monitoring reports to the District, in a District approved format, no later than August 15 for the period of January 1 through June 30 and no later than February 15 for the period of July 1 through December 31. [District Rule 218]

These monitoring reports shall include at a minimum:

- A) the time intervals, date and magnitude of excess emissions, nature and cause of the excess (if known), corrective actions and preventative measures adopted; and
- B) the averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard for the pollutant in question; and
- C) all information pertaining to any monitoring as required by the permit; and
- D) a negative declaration specifying when no excess emissions occurred.

26. National Refractories & Minerals Corporation shall submit an annual compliance certification report to the District and U.S. EPA, in a District approved format, no later than February 15 for the period of January 1 through December 31 of the preceding year. [District Rule 218]

This report shall include a written statement from the responsible official which certifies the truth, accuracy, and completeness of the report and shall include at a minimum:

- A) identification of each term or condition of the permit that is the basis of the certification; and
- B) the compliance status; and
- C) whether compliance was continuous or intermittent; and

- D) the method(s) used for determining the compliance status of the source, currently and over the reporting period.

GENERAL CONDITIONS

27. National Refractories & Minerals Corporation shall comply with all conditions of this federal operating permit. Any noncompliance with a permit condition constitutes a violation of the Federal Clean Air Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. [District Rule 218]
28. In an enforcement action, the fact that National Refractories & Minerals Corporation would have to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit is not a defense. [District Rule 218]
29. This permit may be modified, revoked, reopened and reissued, or terminated for cause as determined by the District. The filing of a request by National Refractories & Minerals Corporation for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 218]
30. This permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. [District Rule 218]
31. National Refractories & Minerals Corporation shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, National Refractories & Minerals Corporation shall also furnish to the District copies of records required to be retained by this permit. [District Rule 218]
32. For applicable requirements that will become effective during the permit term, National Refractories & Minerals Corporation shall meet such requirements on a timely basis unless a more detailed schedule is expressly required by the applicable requirement. [District Rule 218]
33. Any document submitted to the District pursuant to this permit shall contain certification by the responsible official of truth, accuracy and completeness. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. National Refractories & Minerals Corporation shall promptly, upon discovery, report to the District a material error or omission in these records, reports, plans, or other documents. [District Rule 218]

34. National Refractories & Minerals Corporation shall report any violation of any requirement contained in this permit to the District within 96 hours after such occurrence. The violation report shall include the time intervals, date and magnitude of excess emissions; nature and cause of the excess (if known), corrective actions and preventive measures adopted. [District Rule 218]
35. Upon any administrative or judicial challenge, all the emission limits, specific and general conditions, monitoring, record keeping, and reporting requirements of this permit, except those being challenged, remain valid and must be complied with. [District Rule 218]
36. For this federal operating permit to remain valid through the permit term of five years from the date of issuance, National Refractories & Minerals Corporation shall pay an annual emission fee based upon the requirements of District Rule 308. [District Rule 218]
37. National Refractories & Minerals Corporation shall have available at the facility at all times a copy of this federal operating permit. [District Rule 218]
38. For protection from enforcement action based upon an emergency, as defined in District Rule 218, the responsible official for National Refractories & Minerals Corporation shall submit to the District relevant evidence which demonstrates [District Rule 218]:
 - A) an emergency occurred; and
 - B) that National Refractories & Minerals Corporation can identify the cause(s) of the emergency; and
 - C) that the facility was being properly operated at the time of the emergency; and
 - D) that all steps were taken to minimize the emissions resulting from the emergency; and
 - E) within two working days of the emergency event, National Refractories & Minerals Corporation provided the District with a description of the emergency and any mitigating or corrective actions taken.
39. Upon presentation of credentials, National Refractories & Minerals Corporation shall allow the District, the ARB, the EPA, or an authorized representative, to perform the following [District Rule 218]:
 - A) enter upon the premises where the federal operating permit source is located or in which any records are required to be kept under the terms and conditions of this federal operating permit;
 - B) to have access to and copy any records required to be kept under the terms and conditions of this federal operating permit;
 - C) to inspect any equipment, operation, or process described or required in this federal operating permit; and,

D) to sample emissions from the source.
